

BIOTERRORISM:
ANTHRAX

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

TACTICS AGAINST TERRORISM: **ANTHRAX**

South Carolina Department of Health and Environmental Control
Office of Public Health Preparedness



What is bioterrorism?

Bioterrorism is the intentional use of bacteria, viruses, or natural toxins (poisons) as a weapon to kill, injure or produce disease in humans, animals or plants. Terrorists may use such an attack to create fear, disrupt the economy, or to get a response from the government.

What is anthrax?

Anthrax is a naturally occurring disease caused by bacteria that are spread by spores. Spores are hibernating organisms that awaken in the right conditions – such as being eaten or inhaled. In nature, anthrax may be found in animals like cows, sheep, goats, and horses. Anthrax is not spread from person to person. Under normal conditions, it occurs rarely in humans.

Types of anthrax

Skin (cutaneous) anthrax makes up 95 percent of anthrax cases. It is the least dangerous type of anthrax. You get it when anthrax bacteria enter a cut or wound in the skin. This infection most commonly occurs when industrial workers handle skins, wool or fur of infected animals. If you get medical care, you are not likely to die. About one in four who don't get medical care for cutaneous anthrax die.

Lung (inhalation) anthrax is the most deadly form of anthrax, caused by breathing in anthrax spores. Nearly all patients who don't get treatment for lung anthrax will die.

Digestive (gastrointestinal) anthrax comes from eating food infected with anthrax bacteria or eating meat from infected animals that is not cooked long enough. Nearly all patients who don't get treatment for digestive anthrax will die.

Note: Information in this brochure will relate mostly to lung anthrax because it is the most likely form to be caused by terrorists. Terrorists could process the anthrax to make it stronger and include it in a weapon. This "weaponized" anthrax would be capable of causing many people to become sick very quickly.

Anthrax was used as a biological terrorism weapon in the United States in 2001. It was sent in letters through the U.S. Postal Service. Twenty-two people were infected by breathing in anthrax spores. Five died. Steps have been taken to make mail service safer in South Carolina and other states.

How anthrax can be used for terrorism

Terrorists can use anthrax as a weapon to attack many people at one time. It can be strengthened and used in powder form. Anthrax can be spread to people in several ways including:

- It can be released into the air.
- It can be released in a building's air system
- It can be sent through the mail.
- It can be added to food.

Symptoms of skin anthrax

- Skin anthrax starts as a small sore usually on the arms or hands. The sore becomes a blister. The blister then becomes a skin ulcer with a black area in the center. The sore, blister and ulcer do not hurt.

Symptoms of lung anthrax

- The first symptoms are like those from a cold or the flu and can include a mild fever and muscle aches. Later symptoms include cough, chest discomfort, shortness of breath, and tiredness. Symptoms may improve after several days but return in a more deadly form a few days later. However, you should not assume that just because a person has cold or flu symptoms that they have lung anthrax.

Symptoms of digestive anthrax

- The first symptoms are sore throat, nausea, loss of appetite, bloody diarrhea and fever, followed by stomach pain.

Symptoms for all types of anthrax can appear within a week of being exposed to the bacteria. For lung anthrax, symptoms *can* take over a month before they appear.

How Soon Do Infected People Get Sick?

Symptoms can appear within 7 days of coming in contact with the bacterium for all three types of anthrax. For lung anthrax, symptoms can appear within a week or can take up to 42 days to appear.

Treating anthrax

If you are infected with anthrax, you will be given antibiotics to kill the bacteria. You will take the medicine for about two months. It is important to diagnose and treat anthrax early to prevent death.

There is a vaccine that can be given to people to prevent them from getting anthrax. The vaccine is not usually given to the public. It is given to people in the military who might be exposed to anthrax. The vaccine is also given to scientists who work with anthrax.

If you have been exposed to anthrax but are not sick, you can be given medicine to help stop you from getting sick. This medicine is usually taken for two months.

How to protect yourself and others

- If you are exposed to a suspicious powder or other substance and you suspect it might be harmful, dial 9-1-1.
- If you think you may have been exposed to anthrax, call your doctor or public health authorities immediately.
- Animal skins and wool from infected animals may carry anthrax spores. If you work in a business that handles animal skins or wool, you may need to wear protective clothing and wear a mask that covers your nose and mouth. Leather and wool products you buy in stores do not carry anthrax spores.
- Cook infected meat thoroughly to prevent digestive anthrax.

What's being done to protect you?

- The South Carolina Department of Health and Environmental Control (DHEC) and the Centers for Disease Control and Prevention (CDC) keep constant watch for cases of anthrax. Hospitals and doctors are required by law to report every case of anthrax immediately to the local health department. DHEC and the CDC will cooperate with law enforcement to investigate its cause to help prevent others from getting the disease.
- DHEC and the CDC have access to laboratories to test for anthrax. Both agencies also work with hospitals, other laboratories, emergency response teams, and doctors and nurses to make sure they have the medicines they need in case of an anthrax attack.
- The U.S. Postal Service has installed equipment at several facilities in South Carolina to detect the presence of anthrax in the mail.
- Your doctor can talk to experts at DHEC and the CDC about anthrax 24 hours a day, seven days a week.

If there is a terrorist event using anthrax, local and state law enforcement and health agencies will provide you with additional instructions for protecting yourself.

Numbers to know

For all emergencies: 9-1-1

SC DHEC (during business hours): (803) 898-3432

CDC: (800) 232-4636

Palmetto Poison Center: (800) 222-1222

For more information

SC DHEC

www.scdhec.gov

www.scdhec.gov/tat (*Tactics Against Terrorism*)

www.scdhec.gov/health/disease/han/anthrax.htm

CDC

www.bt.cdc.gov

www.bt.cdc.gov/agent/anthrax

USDA

www.fsis.usda.gov

The phone numbers for reporting cases or possible cases of bioterrorism to your local health department and the DHEC Division of Acute Disease Epidemiology are available at: www.scdhec.gov/administration/library/CR-009025.pdf

This publication provides health information for your general knowledge. Talk to your doctor about your concerns about any medical condition. DHEC does not recommend you diagnose or treat yourself for a serious illness.

Notes:







South Carolina Department of Health
and Environmental Control

www.scdhec.gov/tat

SOUTH CAROLINA

Tactics
Against
Terrorism

Be Safe. Be Smart.